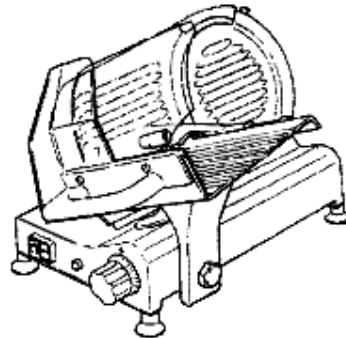


## **GRAVITY SLICERS**

**F 195**

**S 220**

**F250 ES**



**S 220 AF**

**F 250 E**

**F 250 I**

**F 250 TSV**

**F 275 E**

**F 275 I**

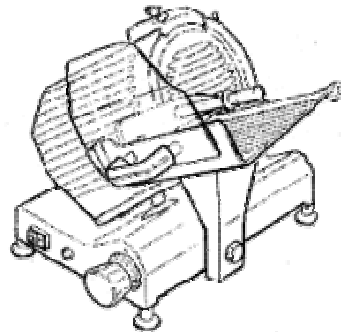
**F 300 E**

**F 300 CL**

**F 300 I**

**F 330 I**

**F 350 I**



### **NOTES FOR THE USER**

This manual consists of 28 pages as follows:

- Title page with notes for the user (back side not printed);
- Contents, page 1;
- Page 2 to page 25 carrying progressive numeration (back of page 25 not printed).

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## FOREWORD

### SCOPE OF THIS MANUAL

This manual contains all the necessary information to install, use and service the gravity slicers for food (please see models in paragraph "Technical Description"). The scope of this document, hereinafter the "manual", is to permit users, and especially end users, to take all the cautions and provisions possible for using this machine safely and for a long time.

### GENERAL INFORMATION

#### LIMITS OF USE – SAFETY NORMS

These machine were designed and built to slice foodstuff in compliance to the norms of the 89/392 - 89/336 Directive and following amendments CE 91/368 - 93/44 - 93/68 CE, EN 1974 directive 89/109.

#### GENERAL SAFETY REGULATIONS

The slicers must be used only by suitably trained personnel. Furthermore, this personnel must have read this manual carefully.

##### ***In particular, please comply to the following instructions***

- Install the machine according to the instructions contained in the "Installation" section.
- Do not remove the transparent protections, do not modify nor exclude the mechanical and electrical safety devices.
- Do not use the machine with improvised connections, or provisional or non insulated cables.
- Check the power cable and gland plate on the machine body regularly and when necessary have them replaced by qualified personnel.
- In case of anomalies, defective operation, incorrect movement, unusual noise, etc stop the machine immediately.
- Before cleaning or servicing, disconnect the machine from the mains.
- Always use scratch-proof and non-slip gloves during cleaning or maintenance.
- Lay or remove the goods to be sliced on the sliding plate only when the latter is completely pushed back and the thickness control knob positioned to 0.
- To move the carriage tray when slicing, use the handle or the product grip handle.
- For extraordinary maintenance (to replace the sharpener wheels, the blade, or others) please contact the manufacturer or qualified and duly authorized personnel.
- Avoid running the slicers with no product on it
- The slicers are equipped with a ventilated motor, except for the F 195 model for which operating time must not exceed 15 minutes to avoid motor overheating. After a period of rest, operation can be resumed.

***WARRANTY: 1 YEAR except for the electrical parts***

## MANUFACTURER'S WARRANTY AND LIABILITY

The manufacturer's warranty covering the good functioning of the machines and their compliance to the service for which they have been designed depends on the correct application of the instructions contained in this manual.

***The Manufacturer assumes no liability either direct or indirect deriving from:***

- *Failure to comply with the instructions contained in this manual;*
- *Use of the machine by personnel who has not read or fully understood the content of this manual;*
- *Use not complying to the specific norms currently applicable in the country of installation;*
- *Unauthorized modifications and/or repairs;*
- *Use of non original accessories or spare parts.*
- *Exceptional events.*

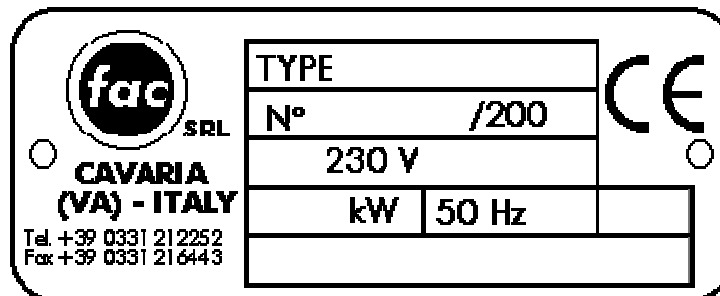
## PLATES – CONFORMITY MARKS

The machines have been constructed in compliance with the European Directive 89/392 and subsequent amendments. All the parts making the machine meet the terms of the Directive and the CE marks have been applied to substantiate this compliance.

The plate carrying the Manufacturer's data, the machine data and the CE mark are applied onto the machine base under the blade guard tie-rod knob.

This plate must never be removed and must always be legible.

***In case of wear or damage, the user must replace it.***



## ENVIRONMENTAL CONDITIONS OF USE

- Temperature..... from -5 °C to + 40 °C
- Relative humidity..... max 95%

## PACKING

### OPENING THE BOX

On reception check packaging integrity, otherwise inform the forwarding agent or the area agent immediately.

*To unpack the machine, proceed as follows:*

- Open the box and remove your copy of the manual of use and maintenance, then proceed according to the instructions found on that manual;
- Lift the machine still wrapped in a transparent polyethylene sheet and extract it from the box;
- Now check the box content and make sure it corresponds to what shown on the external label.

### **WARNING:**

*The packaging components (cardboard, polyethylene, and others) are classified as normal solid urban waste and can therefore be disposed of without difficulty. **In any case, for suitable recycling, we suggest disposing of the products separately (differentiated waste) according to the current norms.***

**DO NOT DISCARD ANY PACKAGING MATERIALS IN THE ENVIRONMENT!**

## TECHNICAL DESCRIPTION AND PROPOSED CONDITIONS OF USE

### GENERAL DESCRIPTION

The machine is essentially made of a base supporting a circular blade mounted in tilted position. This blade is driven by an electrical motor to slice foodstuffs. The machine is equipped with a carriage holding a product tray and sliding on tracks mounted under the base top, parallel to the blade.

Slice thickness is adjusted by means of a gauge plate mounted in front of the blade. This plate, against which rests the product to be sliced is moved transversally with respect to the blade by a value corresponding to the desired slice thickness. The product is fed to the machine (towards the gauge plate) by gravity.

All the machine components are made of polished and anodically oxidized aluminium alloy, of stainless steel and food grade plastic material.

The blade is driven by an electrical motor, transmission is by means of a longitudinally grooved belt.

The machine is started and stopped by a control button provided with auxiliary circuit preventing accidental restarts after an outage.

Some of the machine models have a user-friendly and safe built-in blade sharpener.

### MECHANICAL AND ELECTRICAL SAFETY DEVICES

***The following mechanical safety devices were installed:***

- A series of aluminium and transparent plastic guards on the product carriage.

***The following electrical safety devices were installed:***

- Start/stop button system requiring a voluntary restart of the machine in the case of an outage or interruption of the power supply.
- Safety micro-switch preventing the motor from starting when the blade guard is removed (not available on the F 195, S 220 and F 250ES machines).

### WARNING: RESIDUAL RISKS

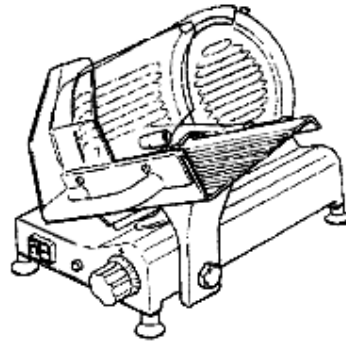
**Notwithstanding all the possible cautions taken during the design and the construction of the machine, residual risks (cutting) still exist during use or during cleaning or maintenance. Therefore be careful and PAY THE UTMOST ATTENTION to what you are doing.**

**DO NOT use the machine if you are not in perfect psychological and physical conditions. DO NOT ALLOW anyone near the machine when it is in use. ALWAYS wear gloves that can resist cuts or tears when cleaning, lubricating or sharpening the blade.**

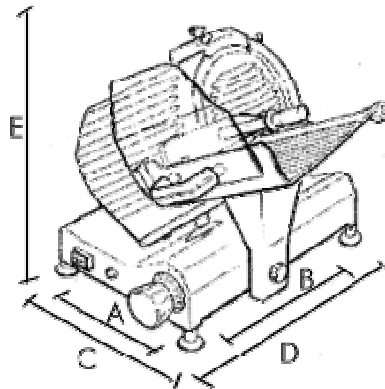
**Slice only the products mentioned as sliceable. NEVER try to slice products that have been mentioned as non sliceable.**

## DIMENSIONS

**F 195**  
**S 220**  
**F250 ES**



**S 220 AF**  
**F 250 E**  
**F 250 I**  
**F 250 TSV**  
**F 275 E**  
**F 275 I**  
**F 300 E**  
**F 300 CL**  
**F 300 I**  
**F 330 I**  
**F 350 I**



## MAIN TECHNICAL DATA

### GRAVITY SLICERS

Version	F195	S220 220AF	F250E F250ES	F250I	F275E	F275I	F300E	F300I	F300CL	F330I	F350I
Motor HP	0,20	0,25	0,30	0,35	0,30	0,35	0,35	0,50	0,35	0,50	0,50
Blade Ø mm	195	220	250	250	275	275	300	300	300	330	350
Rpm	300	300	300	300	300	300	300	280	300	280	260
Min. slice thickness mm	0/15	0/15	0/16	0/16	0/16	0/16	0/16	0/16	0/16	0/16	0/16
cut: L x H mm	160x140	210x160	240x190	260x190	240x190	260x190	260x220	285x230	310x220	285x250	325x260
A mm	255	280	290	340	290	340	340	410	350	410	415
B mm	345	415	440	465	440	465	465	530	570	530	580
C mm	360	405	425	480	440	495	495	540	560	550	585
D mm	520	580	620	630	620	640	650	770	870	770	890
E mm	315	340	370	440	390	440	440	465	500	465	480
Peso: Kg	10	13,5	15,5	21	16,5	22	23	30	27,5	32	36
Sharpener	separate	Separate Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in

### VERTICAL SLICERS

Version	F250TSV F250TCV	F300TSV F300TCV	F330TSV E F330TCV E	F350TSV F350TCV	F370TSV F370TCV
Motor HP	0,35	0,50	0,50	0,50	0,50
Blade Ø mm	250	300	330	350	370
Rpm	300	280	260	260	260
Slice thickness mm	0/16	0/16	0/16	0/16	0/16
Cut: L x H mm	260x190	260x200	250x210	300x265	290x275
A mm	360	420	420	530	530
B mm	460	530	530	650	650
C mm	520	550	550	650	650
D mm	530	710	710	820	820
E mm	500	610	610	640	640
Weight: Kg	24	40	41	45	46
Sharpener	Built-in	Built-in.	Built-in.	Built-in.	Built-in.

**Intermittent service** (5 min. pause every 15-20 min. of work) only for F 195. All the other machines have a ventilated motor.

**Supply voltage:** Please see data plate on the machine base



## **SUPPLIED LITERATURE AND ACCESSORIES**

If not otherwise defined at the moment of order, the machines are supplied together with the following:

- EU conformity declaration
- Instructions manual for installation, use and maintenance.

## **PRODUCTS THAT CAN BE SLICED**

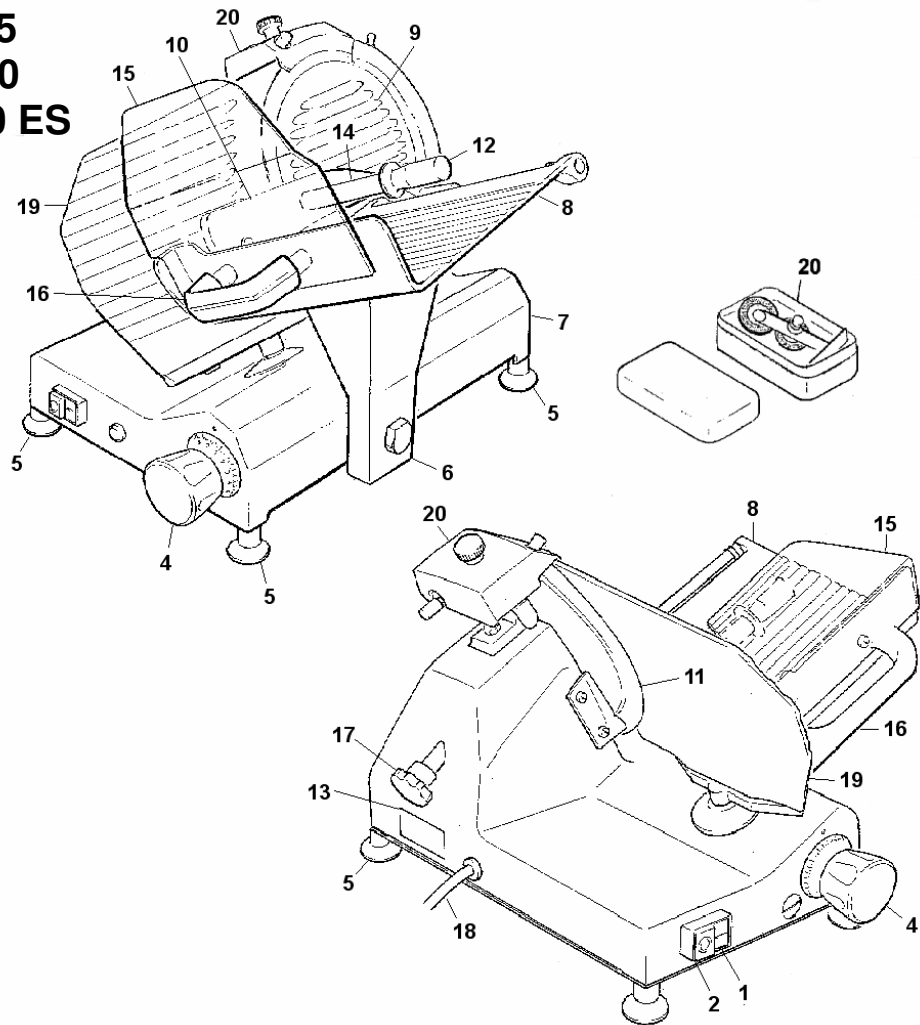
- All types of cold cuts (raw, cooked, smoked);
- Meat without bone (raw or cooked, at a temperature not less than + 3 °C);
- Cheese cuts (obviously types that can be sliced such as gruyere, fontina, etc.).

## **PRODUCTS THAT MUST NOT BE SLICED:**

1. Frozen or deep-frozen food;
2. Food containing bones (meat or fish);
3. Vegetables (all types);
4. Any other non-food product.

## MAIN COMPONENTS I

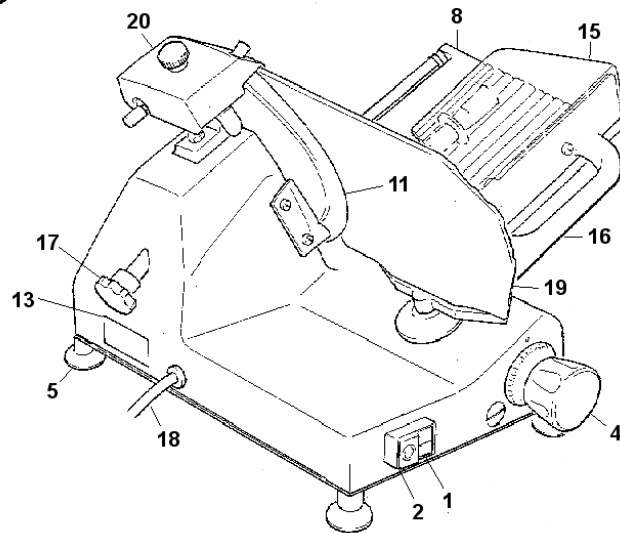
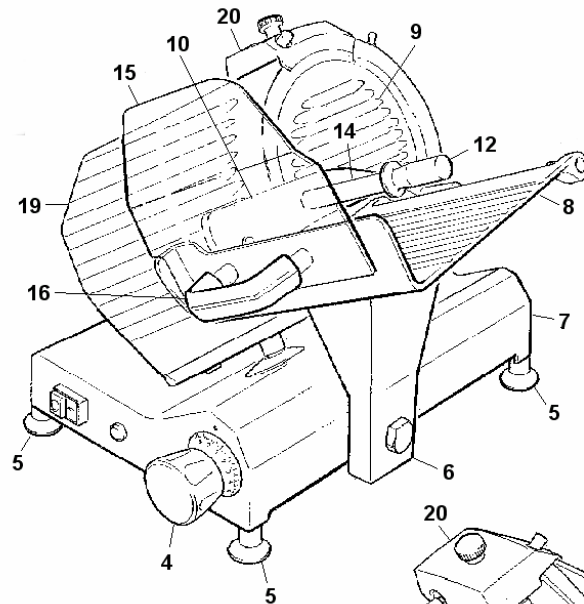
**F 195  
S 220  
F250 ES**



- |                                 |                                  |
|---------------------------------|----------------------------------|
| 1. STARTUP BUTTON (GREEN)       | 11. BLADE                        |
| 2. STOP BUTTON (RED)            | 12. PRODUCT GRIP HANDLE          |
| 3. N.A.                         | 13. MANUFACTURER IDENTIFICATION  |
| 4. SLICE THICKNESS CONTROL KNOB | PLATE, MACHINE DATA AND UE MARKS |
| 5. ADJUSTABLE FOOT              | 14. PRODUCT GRIP HAND PROTECTION |
| 6. CARRIAGE TRAY SUPPORT        | 15. PRODUCT TRAY HAND PROTECTION |
| 7. BASE                         | 16. PRODUCT TRAY HANDLE          |
| 8. PRODUCT TRAY                 | 17. BLADE PLATE TIE-ROD          |
| 9. BLADE PLATE                  | 18. SUPPLY CORD                  |
| 10. PRODUCT GRIP                | 19. GAUGE PLATE                  |
|                                 | 20. SHARPENER                    |

## MAIN COMPONENTS

**S 220 AF**  
**F 250 E**  
**F 250 I**  
**F 250 TSV**  
**F 275 E**  
**F 275 I**  
**F 300 E**  
**F 300 CL**  
**F300 I**  
**F 330 I**  
**F 350 I**



- |                                    |                                  |
|------------------------------------|----------------------------------|
| 1. STARTUP BUTTON (WHITE OR GREEN) | 11. BLADE                        |
| 2. STOP BUTTON (RED OR BLACK)      | 12. PRODUCT GRIP HANDLE          |
| 3. N.A.                            | 13. MANUFACTURER IDENTIFICATION  |
| 4. SLICE THICKNESS CONTROL KNOB    | PLATE, MACHINE DATA AND EU MARKS |
| 5. ADJUSTABLE FOOT                 | 14. PRODUCT GRIP HAND PROTECTION |
| 6. CARRIAGE TRAY SUPPORT           | 15. PRODUCT TRAY HAND PROTECTION |
| 7. BASE                            | 16. PRODUCT TRAY HANDLE          |
| 8. PRODUCT TRAY                    | 17. BLADE PLATE TIE-ROD          |
| 9. BLADE PLATE                     | 18. SUPPLY CORD                  |
| 10. PRODUCT GRIP                   | 19. GAUGE PLATE                  |
|                                    | 20. SHARPENER                    |

## **MACHINE COMMISSIONING AND FUNCTION TESTS**

### **INSTALLING THE MACHINE**

Position the machine on a well leveled, smooth and dry top suitably dimensioned to withstand the machine weight.

### **ELECTRICAL CONNECTION**

Install the machine near a EU compliant outlet derived from a system meeting the current norms.

**The user is responsible for** ascertaining that the electrical system is suitably dimensioned and functions correctly (supply line, outlet, distribution panel, differential protecting breaker, grounding).

**Before carrying out the connection** ascertain that the mains characteristics correspondent to those indicated on the machine plate.

## COMMANDS

### START AND STOP BUTTONS

- Press the white or green button (1) to start running the blade.
- The light turns on to indicate that the machine works correctly.
- Press the red or black button to stop the blade.

**Slice thickness** can be adjusted by turning the graduated knob (4) counterclockwise.

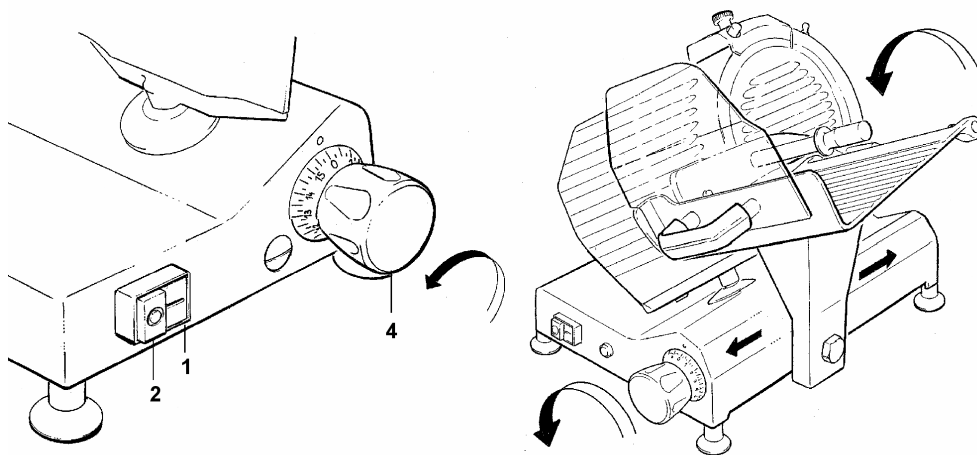
**Thickness adjustment range:** see paragraph "Technical description and conditions of use".

### FUNCTIONING TEST AND BLADE ROTATION DIRECTION

Start the machine and check whether the light is on; make sure that the blade rotates in the direction indicated by the arrow (counterclockwise if you look at the machine from the blade plate side).

**For machines with three-phase supply:** if the blade rotates in the other direction, stop the machine immediately and call qualified personnel to **invert the plug supply wires**.

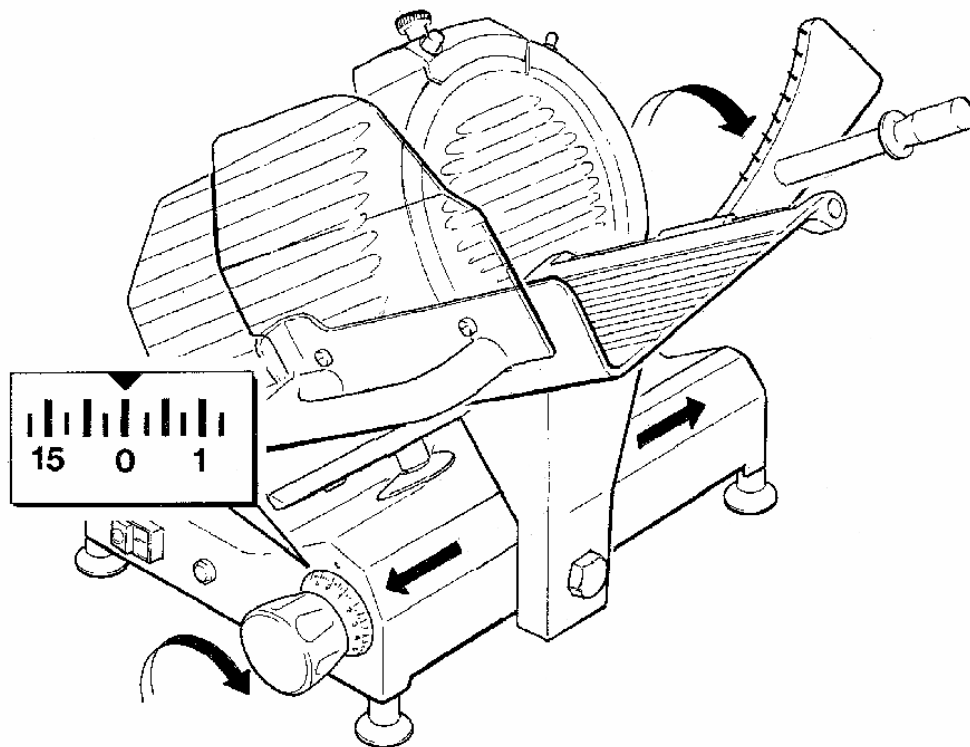
- Ascertain that the carriage and the product grip slide correctly;
- Ascertain that the gauge plate works and adjust thickness to desired value.



## USING THE MACHINE

### LOADING THE PRODUCT ON THE TRAY AND SLICING

- Ascertain that the thickness control knob is correctly positioned to '0'.
- Draw back the carriage completely (towards the operator) to loading position.
- Lift the product grip by pulling it away by 10 cm from the blade and put it in rest position.
- Lay the product to be sliced against the wall on the operator side.
- Secure by means of the product grip by exerting a slight pressure.
- Adjust the thickness gauge. Start the blade by pressing on the green button.
- Grip the handle affixed onto the plate and start the forward and backward cutting movement. The product travels towards the gauge plate by gravity.
- When the product weight or its dimensions do not provide a satisfactory cut by effect of the gravity, use the product grip handle.
- When finished, return the thickness control knob to '0' and draw the carriage back.
- Stop the blade by pressing the red button.



## CLEANING THE SLICER

### GENERAL

The machine must always be accurately cleaned **at least once a day**, and more often if necessary.

**Always use protective gloves.**

### DISASSEMBLING THE MACHINE FOR CLEANING

- Disconnect the plug from the mains;
- Turn the gauge plate knob to '0';
- Remove the various components as described in the following paragraphs:
- Unscrew (counterclockwise) the blade guard rod;
- If the blade guard is blocked, press on the rod knob to move it a little;
- Extract the rod and remove the blade guard using for this operation only the side knobs.
- Loosen and remove the two fixing screws with knurled head;
- Remove the slice guard.

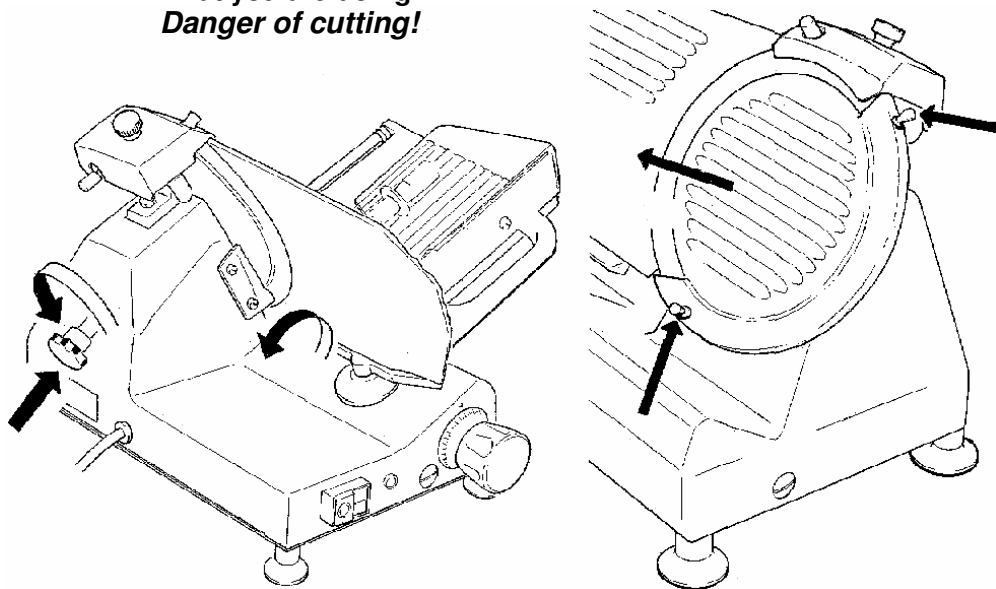
To clean the machine body and the blade use only a cloth damped with water and biodegradable lathery detergent having 7-8 pH and at a temperature not below + 30°C.

Do not clean the machine by using water or vapor spruiys or similar systems.

### WARNING:

Use scratch-proof and non-slip gloves to carry out the following operations. Proceed carefully and pay attention to what you are doing.

***Danger of cutting!***



## REASSEMBLING THE MACHINE

Proceed as indicated for the previous operations but in reverse order.

## MAINTENANCE

### GENERAL

*The operator is allowed to perform the following maintenance operations:*

- **Blade sharpening:** regularly (intervals and duration obviously depend on the use of the machine, time of use and type of product sliced);
- **Lubrication of carriage sliding guides:** once a week.
- **Lubrication of product grip sliding bar:** once a week.
- **Adjustment of motor belt tension:** as required.
- **Checking the power supply cord conditions and of the gland plate:** from time to time.

### WARNING

*Maintenance must always be carried out when the **machine is disconnected from the mains** and if no other position is specifically required, with the thickness control knob on '0'.  
not specifically*

*The following maintenance operations are to be entrusted only to **personnel authorized by the manufacturer**:*

- **Replacing the blade;**
- **Replacing the sharpener stones;**
- **Replacing the motor transmission belt;**
- **Replacing electrical system components under the machine base;**
- **Repairing structural parts, repairing the components under the base.**

### BLADE SHARPENING

Before proceeding, clean the machine accurately as explained in the previous paragraphs:

### WARNING

*Sharpening can be done only up to 12 mm of the blade diameter value.*

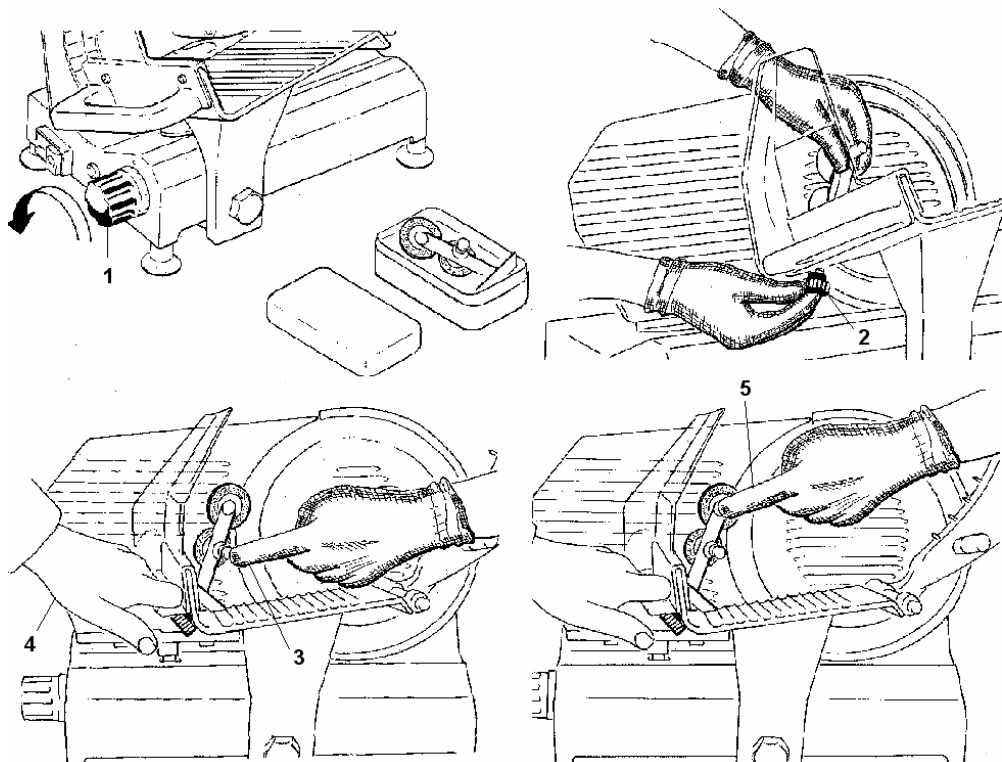
***Beyond this value, the BLADE MUST BE REPLACED ONLY by personnel AUTHORIZED BY THE MANUFACTURER.***



## SHARPENING

### Models with separate sharpener

1. Clean the blade accurately using denaturized alcohol to degrease it.
2. Turn the graduated knob (1) towards the left to open completely.
3. Remove the sharpener from its box, unscrew the knurled knob and insert the threaded metallic pin inside the hole (2) provided for on the product tray so that the two emery wheels are turned towards the blade. Snap into place by pressing on the lower wheel button (3). The lower wheel must remain inserted for a length equal to half of its diameter between the blade on which it rests and the adjustment plate.
4. Insert the plug into the outlet and operate the switch while using the handle to block the product tray then the sharpener in the above position (4);
5. Allow the blade to rotate for about 30 to 40 seconds then use the switch to stop it. Brush a pencil lightly on the external side of the blade to check for a slight spud; restart the blade by maintaining the wheel button (5) pressed for 10 seconds.



## SHARPENING

### Versions with built-in sharpener

To sharpen the blade periodically as soon as the cutting capacity decreases. Please proceed as per the following instructions:

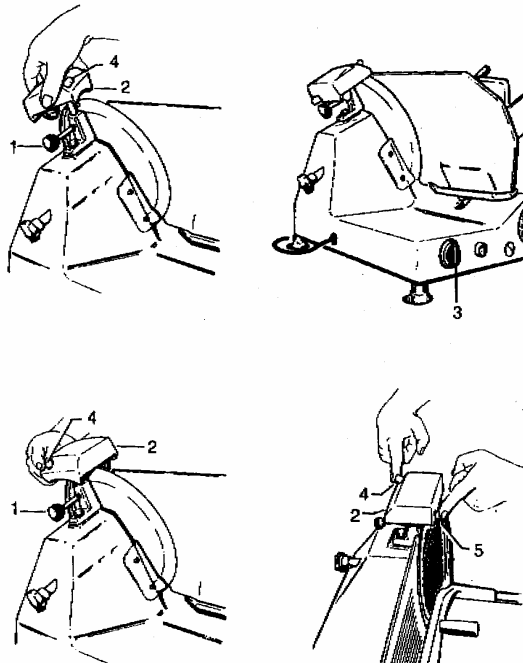
1. After disconnecting from the mains, clean the blade accurately using denaturized alcohol to degrease it.
2. Loosen the knob (1) and turn the sharpener (2) by 180° and insert the wheels on the slicer blade. Relock the knob.
3. Operate the switch (3) and press the button (4);
4. Allow the blade to rotate for about 30 to 40 seconds then use the switch (3) to stop it. Brush a pencil lightly on the external side of the blade to check for a slight spud;

**We advise performing this operation with the utmost care as the blade is extremely sharp.**

5. If some spud is found, operate the switch (3) again for 3 to 4 seconds by pressing the buttons 4 and 5 at the same time.

**DO NOT PROLONG THIS OPERATION BEYOND THE FEW SECONDS MENTIONED OTHERWISE THE BLADE EDGE WILL WARP.**

6. After completing sharpening, we advise cleaning the wheels using a small brush and alcohol.
7. Now return the sharpener to its original position.

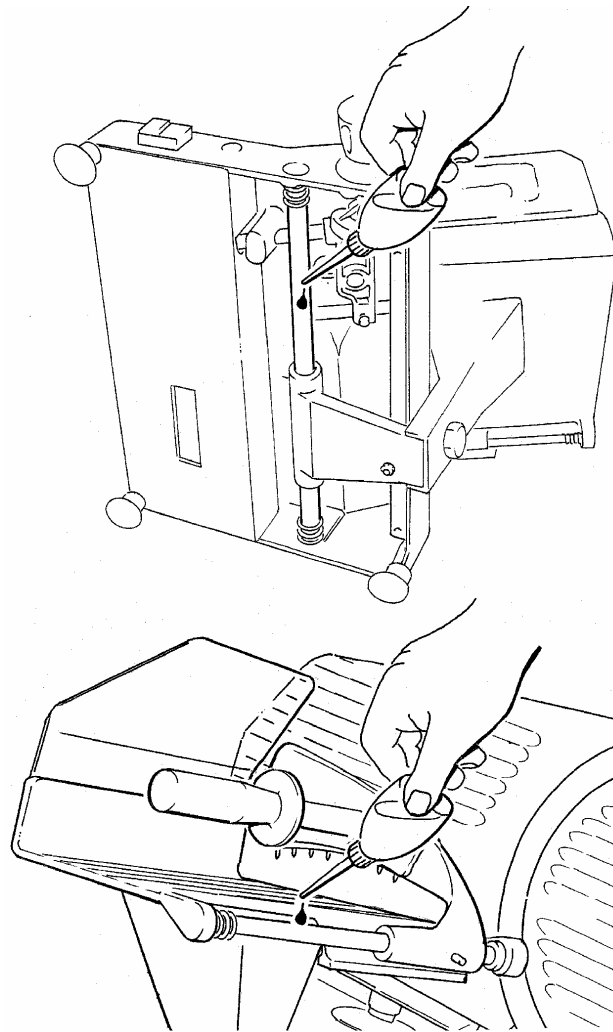


## LUBRICATION

Carriage sliding guides product grip (once a week)

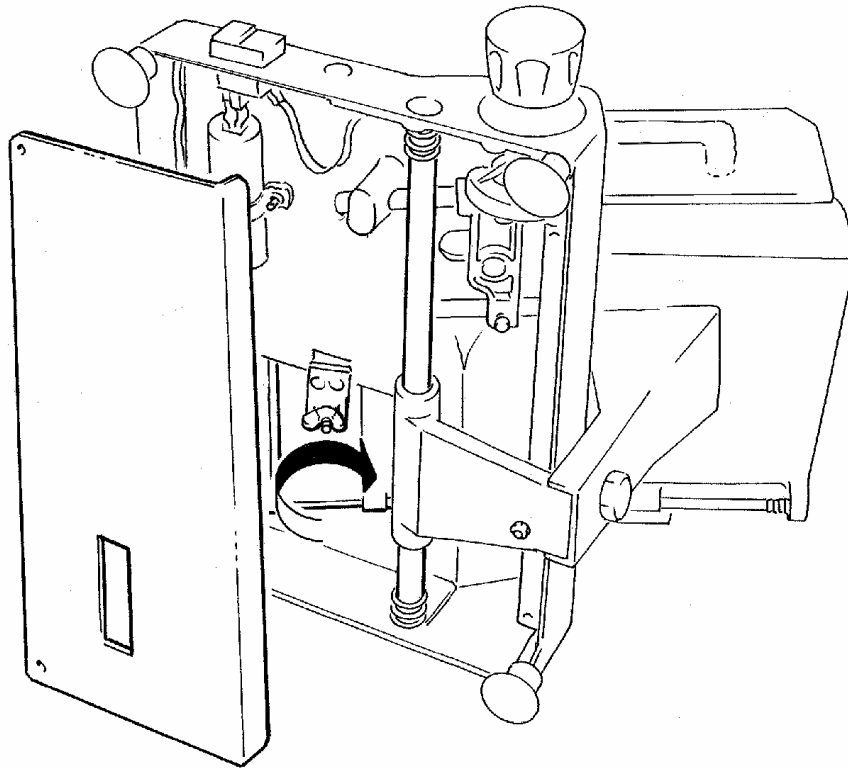
*Use only the oil provided, otherwise use white Vaseline oil.*  
**DO NOT USE VEGETAL OILS.**

- Spread a **small quantity of oil** on the bar and move the assembly 3 or 4 times.
- Clean as required to remove excess of oil.



## ADJUSTING THE MOTOR BELT TENSION

After a given period of service an unusual noise may occur because of the belt bedding. In this case, tighten the belt-stretcher on the side of the motor under the machine base.



## TROUBLESHOOTING AND REMEDIES

The table below indicates the most common problems that may arise during slicing and the necessary remedies.

PROBLEM	POSSIBLE CAUSE	REMEDY
The machine does not start when the green button is pressed	No power supply The blade guard is not correctly positioned. Defective electrical control circuit.	Ascertain that the plug is correctly inserted. Check Call technical assistance
The machine does not start, and there is continuous noise like a buzz (only in the case of machines equipped with three-phase motors).	The motor is running on single-phase mode	Press the red button immediately and have the power supply cord and the circuits upstream verified by qualified personnel.
When the green button is pressed, the machine starts, but the white functioning light is not on.	Defective indicator	Do not use the machine when the pilot lamp is not on. Call technical assistance
The machine starts, but there are vibrations. The motor is very hot and there is a bad smell.	Defective motor or transmission.	Do not use the machine. Call technical assistance.
Under strain, the machine slows down or comes to a stop.	Defective transmission	Call technical assistance
Excessive resistance to product slicing.	The blade is blunt	Sharpen the blade
The slices are ragged and/or shaped irregularly	The blade is blunt The blade is excessively worn out	Sharpen the blade Call technical assistance
Unsatisfactory blade sharpening	Worn wheels	Replace the wheels. Call technical assistance
The product tray does not slide	Guides are insufficiently lubricated	Lubricate
When the red button is pressed, the machine does not stop	Defective electrical control circuit	Stop the machine, unplug from mains and call technical assistance

## DISMANTLING THE SLICER

These machines are made of the following elements:

- *Aluminium frame;*
- *Stainless steel fittings and others;*
- *Electrical parts and cords;*
- *Electrical motor;*
- *Plastic materials, etc.*

Whether dismantling is entrusted to third parties or done in-house (in that last case you will have to separate the various materials) please note that disposal of the materials can only be carried out by duly authorized businesses.

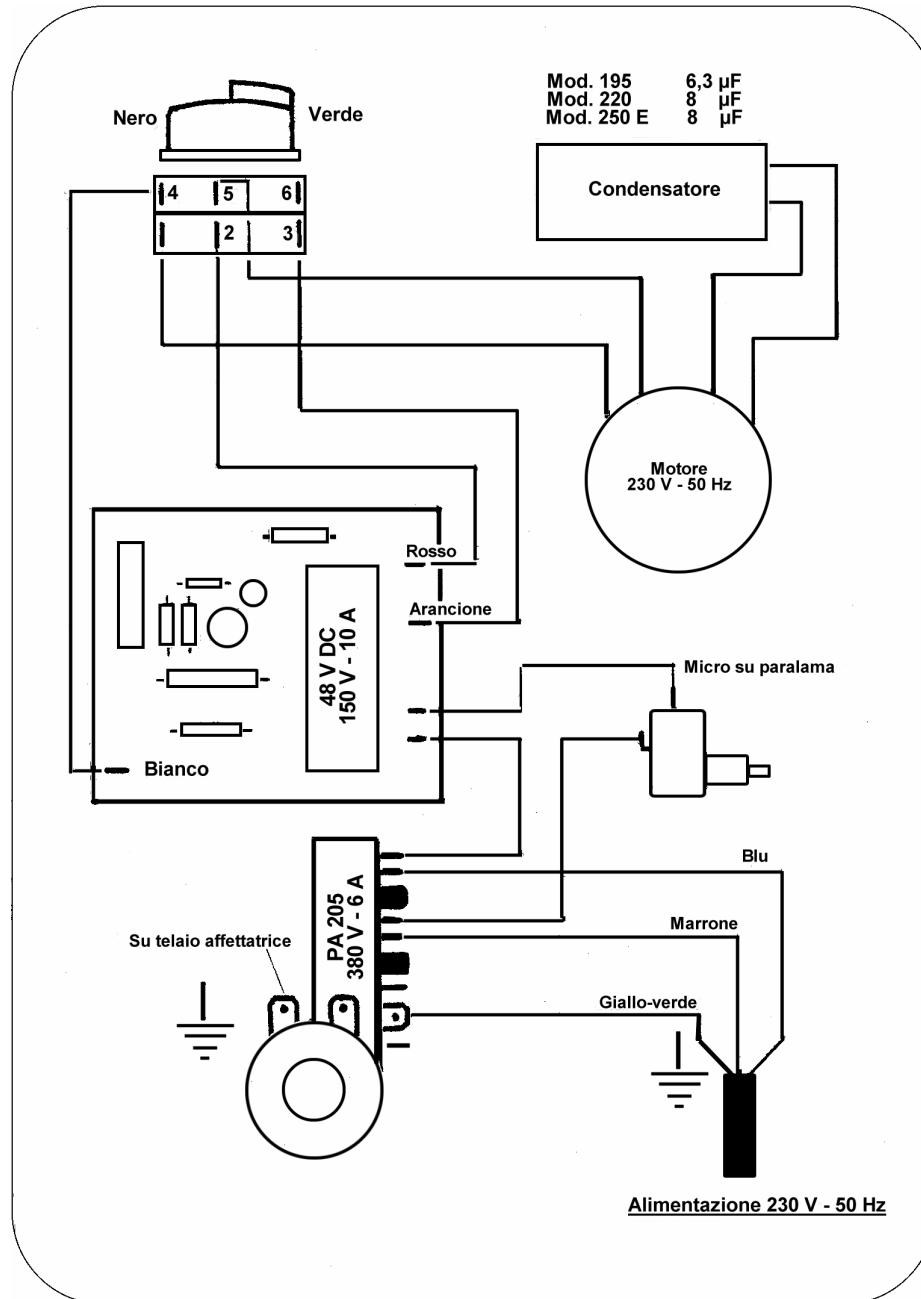
In any case, please comply to the current norms of your country.

### WARNING

***In any case, to remove the blade and dispose of it, you must contact the manufacturer or personnel duly authorized by the manufacturer.***

***NEVER DISPOSE OF WASTE IN AREAS WHERE ACCESS IS NOT DELIMITED BY BARRIERS AND FORBIDDEN BY WARNING SIGNS AS THIS WASTE REPRESENTS A SERIOUS DANGER, ESPECIALLY FOR CHILDREN AND ANIMALS. ANY RESPONSIBILITY ARISING OUT OF INCORRECT DISPOSAL FALLS ON THE OWNER.***

# **ELECTRICAL DIAGRAM SIG. 97 (versions 195-220-250 E)**



**ELECTRICAL DIAGRAM 97 FA (for versions 250 I-300 E-275 I)**



**ELECTRICAL DIAGRAM 97 FA (for versions 300 I – 350 I)**

## **THREE-PHASE ELECTRICAL DIAGRAM 1893 (all versions)**